

APPARATUS AND METHOD FOR PROTECTING GROUNDING
ELECTRODE CONDUCTORS FROM OVERCURRENTS

Abstract: A safe method and apparatus for interrupting electric utility ground and open neutral fault currents and isolating customer's grounding system from utility's neutral utilizing thermal-magnetic circuit breaker pole(s) (18) electrically connected between the neutral bus/lug(s) (38) and the equipment ground bus/lug(s) (32). In addition the grounding electrode conductor (26) is connected directly to the equipment ground bus/lug(s) (32). The method of overcurrent protection for grounding electrode conductors is applicable to electrical installations where from one to six main circuit breakers are used. Circuit breaker enclosure(s) (10) are bonded to the equipment ground bus/lug(s) (32). This method is applicable to load centers, panelboards, and switchboards rated 600 volts or less, single phase or three phase. Ampere ratings vary from 20 amperes to 4,000 amperes. Short circuit ratings vary from 10,000 to 200,000 RMS symmetrical amperes.